REMARKS/ARGUMENTS

Reconsideration of this application is respectfully requested.

Claim 1 is amended to clarify that the first part is a single part with no alternative first parts relating to different resolutions. Claim 1 is also amended to clarify that the at least two alternative second parts provide "respective different resolutions."

Claim 1 has been amended to reverse earlier amendments restricting the claimed invention to audio and video data. Claims 2 and 3 are similarly amended to reverse earlier amendments restricting the invention to audio and video data. The description of the invention is not restricted to audio plus video data, but covers other pairings, including text and graphics.

Claim 8 is also amended to clarify that the audio part is a single part with no alternative first parts relating to different resolutions.

The rejection of claims 1, 2 and 8 under 35 U.S.C. §103 as allegedly being made "obvious" based on Larner '817 in view of Aharoni '694 is respectfully traversed.

Larner teaches a media control system for directing primary and ancillary types of media to primary and ancillary devices (see Abstract).

The applicants' invention exploits a specific composition of data for transmission not found in Larner wherein the data comprises a single first part and a number of alternative second parts such that, while there is a choice as to which of the alternative second parts to transmit based on the capacity of the network, there is no choice as to which first part to transmit. This is not found in Larner.

The applicants' invention uses transmission of the single first part as a means for deriving information on the capacity of the network, which information is then used to

inform a decision as to which of the alternative second parts should be transmitted. This is not found in Larner.

Larner does not describe data comprising a single first part and a plurality of alternative second parts. There is, therefore, no motivation derivable from Larner for using transmission of a first part of data in order to assist in deciding which of alternative second parts of the data to transmit: this question does not arise in the media control system described in Larner.

The main embodiment of Larner, as illustrated in Fig. 1, is arranged with primary media device 20 for receipt of primary media content and separate ancillary media device 22 for receipt of ancillary media content. Primary media device 20 and ancillary media device 22 are connected to media control system 10 via separate networks 30 and 32. The skilled reader of Larner would understand that transmission of primary media content to primary media device 20 via network 30 would not provide any information on the capacity of network 32 over which ancillary media content is to be transmitted to ancillary media device 22. The skilled reader would not be motivated to try to implement in the media control system of Larner the solution provided by the applicants' invention (which is based on sending a first part to determine the capacity of a network before sending a second part over the same network).

Synchronizing presentation of the two parts addressed by the present invention also does not arise in Larner. There is no indication in Larner that the primary media content and ancillary media content require synchronization. No statement is present in Larner indicating any need for synchronization and, furthermore, the specific examples given of media content indicate the contrary.

For example, where the primary media content is textual information and the ancillary media content is a website address, the concept of synchronization makes no sense. Where the primary media content comprises graphical content and the ancillary

media content comprises a photograph or still image, the skilled reader would not see any requirement for synchronization. The same applies to further examples given in Larner, such as a television broadcast linked to a web address; a DVD movie linked to data for an e-commerce transaction, etc.

The Examiner specifically refers to the example of an Internet or radio audio broadcast as an example of primary media content. This primary media content is linked to ancillary media content comprising data supporting one of: obtaining additional information about the artist, purchasing a work by the artist or viewing a video of a recording (not identified as related to the broadcast). None of these combinations requires synchronization as required by applicants' claim 1.

The Examiner is in error in attempting to characterize the ancillary media content linked to the Internet or radio audio broadcast as video. What Larner actually teaches at paragraph [0022] is ancillary media content being provided *"so that the user may view a music video..."* Larner could have simply said that the ancillary media content comprised a music video, but did not. The skilled reader would understand that the wording of paragraph [0022] indicates that the ancillary media content comprises a web address or similar identifier allowing the user to access the music video, but does not comprise video itself. This is consistent with the earlier use by Larner of a web address as ancillary media content.

Larner describes a system involving the sending of types of media data (and also types of non-media data). Apart from this basic level of similarity, Larner fails to disclose any of the features of applicants' claim 1.

None of the ancillary media content of Larner is described as being available in a plurality of alternative parts corresponding to different resolutions. There is no teaching in Larner of synchronizing media data. There is no indication in Larner that network capacity is unknown or that determining network capacity is an issue. There is,

therefore, no motivation for the skilled reader to seek to add means for measuring network capacity to the media control system of Larner and no motivation to consult Aharoni.

As the Examiner has already appreciated, Larner fails to disclose a network having initially undetermined transmission capacity, at least two alternative video second parts corresponding to respective different resolutions, etc. For this admitted list of deficiencies, the Examiner relies entirely upon Aharoni. However, as will be explained in more detail below, Aharoni actually teaches away from these aspects of the applicants' claimed invention.

Aharoni addresses selecting suitable bandwidth video data for transmission over a network whose bandwidth varies over time. There is no teaching in Aharoni of sending initially a first part (to test the network characteristics) and, only after "data indicative of the available transmission capacity" is received, sending a selected second part.

Aharoni teaches transmission of a single combined audio/video file. At 6:30-31, Aharoni states: *"[n]ote that throughout this document, the term video is meant to encompass both video data and audio data"* [emphasis added]. Aharoni describes transmission of data in AVI format – a format which integrates audio and video data in a single file (6:46-52):

> *"The video compression/file generator 14 in combination with the video client 22 comprise a video/audio codec or coder/decoder that functions to compress, code, decode and decompress video streams that are transmitted over the network 20 into a compressed video and audio file. The compressed file may be in any suitable format such as Audio Video Interleaved (AVI) format."* [Emphasis added.]

The applicants' invention provides a solution to selecting between a plurality of second data parts to send over a network where the network capacity is initially unknown. The solution provided by the invention is based on sending initially only a first data part in order that the network capacity can be established before selecting and sending the appropriate second part. The invention exploits the fact that the first part is only available at a single resolution so that there is no benefit in delaying sending until network capacity has been measured.

The skilled reader of Aharoni will need to know at what bit-rate the data should be transmitted prior to receipt of the measured received data level. Aharoni indicates a solution to determining initial bandwidth according to which the network capacity is initially based on a previously used value (i.e., no measurement is carried out prior to transmission; see 12:27-41):

> "It is important to note for the very first video frame or packet that is to be sent to the client, no bandwidth measurement is available. This is because, the bandwidth measurement method, as described in more detail below, utilizes transmitted packets to determine the bandwidth of the channel. Thus, before the first packet is sent, a different mechanisms is used to initially determine the bandwidth of the channel. In its request to open a video source, the video client transmits to the server the bandwidth of the connection the last time the client was connected to a server. This mechanism is based on the assumption that the previous connection a client had with a server is similar to the present connection. In the case where a computer is attached to TCP/IP networks via two ways, e.g., dial up modem and high speed LAN, this mechanism does not provide an accurate initial bandwidth estimate."

Thus, Aharoni provides an alternative solution to the problem addressed by the present invention, but does not teach the innovative solution provided by the present inventors. The initial value used according to Aharoni is not guaranteed to be the

optimum value for the new transmission, given that the network characteristics are described as varying over time. The solution provided by the present invention exploits a first data part not found in Aharoni to measure network capacity before sending a second part – so allowing the optimum bandwidth to be selected for transmission of the second part from the outset.

Aharoni actually thus teaches away from the present invention by providing a different method for determining a value for network capacity prior to the initial transmission of data. Aharoni does not teach the single first data part and alternative second data parts of the invention – and cannot, therefore, teach the method of applicants' claim 1.

Given such fundamental deficiencies of both these references with respect to the above-discussed aspects of the rejected claims, it is not necessary at this time to discuss additional deficiencies of these references with respect to other aspects of the rejected claims. Suffice it to note that, as a matter of law, it is impossible to support even a *prima facie* case of "obviousness" unless the cited references teach or suggest each and every feature of the rejected claim.

The rejection of claim 3 under 35 U.S.C. §103 as allegedly being made "obvious" based on Lamer/Aharoni in further view of Downing '855 is also respectfully traversed.

As the Examiner has already appreciated, even Lamer/Aharoni fail to disclose the entirety of the additional recitations of dependent claim 3. To supply these admitted further deficiencies, the Examiner relies upon Downing.

However, Downing does not supply the already noted deficiencies of Lamer/Aharoni – and also fails to supply the added limitations of claim 3. In particular, while Downing does teach a technique for dynamically allocating audio/video bandwidth over a channel, it does not initially send a first part of synchronized signals in order to

determine link quality, choose one of several second synchronized parts having different respective resolutions to follow – and then during an initial time period of transmitting, to preferentially transmit the second part of the synchronized signals, thereby causing the transmission of the synchronized second part to "catch up" with its corresponding first part (e.g., see the paragraph bridging pages 4-5 of the applicants' specification).

The passage cited by the Examiner at Downing (3:9-11) actually merely summarizes the earlier "background of the invention" section by indicating that a "better system is needed" than was available in the prior art for dynamically and preferentially allocating audio/video bandwidth based upon link quality. However, the "preferential" allocation considered by Downing has to do with on-going channel quality determinations and an adjustment of the bandwidth allocated respectively to audio and video signals thereover based on the on-going channel quality determinations. There is no indication that Downing ever lets one part of an audio/visual synchronized signal set to "get ahead" of the other.

The Examiner's attempt to discover some "motivation" for combining Larner/Aharoni/Downing is simply irrelevant. None of these references deals with an initial time period of transmission of a chosen second part of a synchronized signal set, etc., in the context of applicants' claim 3. It is respectfully noted that the statute itself (and related case law) requires that the applicants' claimed invention be considered "as a whole" when questions of "obviousness" are being determined. In addition, undue use of hindsight is prohibited. There is nothing in any of these three references that would lead the skilled person to attempt to combine all or any parts of them – and even if all parts of all three references are someone "combined" *arguendo*, one is still left without the applicants' claimed invention.

Accordingly, this entire application is now believed to be in allowable condition, and a formal notice to that effect is earnestly solicited.

Respectfully submitted,

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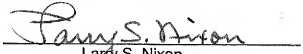
By: 
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